### What should I do?

While you are waiting to see your paediatrician, it is best to give the child pain relievers by mouth, for example

### **PARACETAMOL** every 5-6 hours

(15 mg per kilogram of the child's weight - e.g. 10 kg of weight = 150 mg of paracetamol),

or

#### **IBUPROFEN** every 8 hours

(10 mg per kilogram of the child's weight - e.g. 10 kg of weight = 100 mg of ibuprofen)\*\*\*.

If your child has a cold, irrigate the nostrils with saline solution many times a day.

It is useful to place a warm cloth on his/her ear and keep his/her head slightly raised (with an extra pillow) when he/she is sleeping.

\*\*\* Be careful when converting doses of medicine from mg to ml. If you're not sure, contact your paediatrician.

Using ear drops, expectorants, nasal decongestants or antihistamines is not recommended.

Earache often goes away by itself in a few days. In fact, our guidelines recommend a so-called "watchful wait-and-see strategy" for children over 12 months old without chronic illness. This strategy involves giving only pain relievers regularly and observing the child carefully for the first 48-72 hours after symptoms appear.

Never give antibiotics on your own, because they do not relieve pain.

If symptoms worsen or persist despite the above treatment, contact your paediatrician.

If your paediatrician is unavailable (for example, at night or on a holiday), you can take your child to the emergency room or walk in centre only if:

- your child is less than 1 year old and cries inconsolably;
- treatment with acetaminophen or ibuprofen has not relieved the pain;
- there is pain, reddening and swelling behind the ear;
- there are other symptoms (e.g. high fever, vomiting, etc.).



# **SERVIZIO SANITARIO REGIONALE** EMILIA-ROMAGNA

Azienda Unità Sanitaria Locale di Reggio Emilia IRCCS Istituto in tecnologia avanzate e modelli assistenziali in oncologia

## Earache (otitis)

Informative pamphlet written and shared by primary care paediatricians and hospital-based paediatricians of the healthcare authority Azienda USL - IRCCS of Reggio Emilia



### Introduction

The most common cause of earache is acute otitis media.

This inflammation of the middle ear is almost always caused by inflammation in the nose and throat (because of pharyngitis, the flu, a cold, etc.) which has spread to the ear through a duct called the Eustachian tube.

In many children, this duct is configured in a way that promotes the spread of inflammation from throat to ear.

The cause of otitis is often viral, but sometimes the complication of bacterial infection can set in.

The inflammation causes the production of mucus or pus in the ear, which puts pressure on the eardrum and leads to the appearance of pain -sometimes slowly, sometimes suddenly.

Fever, general malaise and hearing loss may occur.

Sometimes **otorrhea** may occur; that is, the discharge of purulent mucus - even with streaks of blood - from the outer ear.

When this happens, earache generally decreases due to a drop in pressure in the ear and on the eardrum.

In a small child, acute otitis may be accompanied by inconsolable crying, general malaise, loss of appetite and diarrhoea and/or vomiting.

Otitis is not caused by a "blast of air" or the "cold". These conditions can only trigger pain caused by existing otitis.

Exposure to cigarette smoke, even second hand, can trigger otitis in children, so it is best to avoid it.

On the contrary, breastfeeding up to 6 months and frequent hand washing are effective measures for preventing otitis

### How the ear is constructed

The tympanic membrane (*eardrum*) is located at the end of the external auditory canal.

Right behind the eardrum, three small bones (hammer, anvil, stirrup) in the middle ear chamber carry sound from the eardrum to the inner ear (cochlea). From there, it travels to the brain.

This mechanism enables us to hear sound.

The middle ear is connected to the larynx (*throat*) through the Eustachian tube.





